

SEQUENCE LISTING



<110> GEMINI SCIENCE, INC.
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Mikayama, Toshifumi

<120> SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA) PHARMACEUTICAL
COMPOSITIONS AND METHODS OF MAKING AND USING THEM

<130> 021286/0278719

<140> 09/811,367

<141> 2001-03-16

<150> 60/190,716

<151> 2000-03-17

<160> 20

<170> PatentIn version 3.0

<210> 1

<211> 189

<212> PRT

<213> Homo sapiens

<400> 1

Met Thr Asp Ser Val Ile Tyr Ser Met Leu Glu Leu Pro Thr Ala Thr
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Gln Ala Gln Asn Asp Tyr Gly Pro Gln Gln Lys Ser Ser Ser Ser Lys
20 25 30

Pro Ser Cys Ser Cys Leu Val Ala Ile Thr Leu Gly Leu Leu Thr Ala
35 40 45

Val Leu Leu Ser Val Leu Leu Tyr Gln Trp Ile Leu Cys Gln Gly Ser
50 55 60

Asn Tyr Ser Thr Cys Ala Ser Cys Pro Ser Cys Pro Asp Arg Trp Met
65 70 75 80

Lys Tyr Gly Asn His Cys Tyr Tyr Phe Ser Val Glu Glu Lys Asp Trp
85 90 95

Asn Ser Ser Leu Glu Phe Cys Leu Ala Arg Asp Ser His Leu Leu Val
100 105 110

Ile Thr Asp Asn Gln Glu Met Ser Leu Leu Gln Val Phe Leu Ser Glu
115 120 125

Ala Phe Cys Trp Ile Gly Leu Arg Asn Asn Ser Gly Trp Arg Trp Glu
130 135 140

Asp Gly Ser Pro Leu Asn Phe Ser Arg Ile Ser Ser Asn Ser Phe Val
145 150 155 160

Gln Thr Cys Gly Ala Ile Asn Lys Asn Gly Leu Gln Ala Ser Ser Cys
165 170 175

Glu Val Pro Leu His Gly Val Cys Lys Lys Val Arg Leu
180 185

<210> 2
<211> 570
<212> DNA
<213> Homo sapiens

<400> 2

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gactacggac cacagcaaaa atcttctctt tccaagcctt cttgttcttg ccttgtggca      120
ataacttttg ggcttctgac tgcagttctt ctgagtgtgc tgctatacca gtggatcctg      180
tgccagggct ccaactactc cacttgtgcc agctgtccta gctgcccaga ccgctggatg      240
aaatatggta accattgtta ttatttctca gtggaggaaa aggactggaa ttctagtctg      300
gaattctgcc tagccagaga ctcacacctc cttgtgataa cggacaatca ggaaatgagc      360
ctgctccaag ttttctcag tgaggccttt tgctggattg gtctgaggaa caattctggc      420
tgaggtggg aagacggatc acctctaaac ttctcaagga tttcttctaa tagctttgtg      480
cagacatgcg gtgccatcaa caaaaatggc cttcaagcct caagctgtga agttccttta      540
cacggggtgt gtaagaaggt cagactttga                                     570
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<210> 3
<211> 188
<212> PRT
<213> Mus musculus

<400> 3

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Met Ala Asp Ser Ser Ile Tyr Ser Thr Leu Glu Leu Pro Glu Ala Pro
1           5           10           15

Gln Val Gln Asp Glu Ser Arg Trp Lys Leu Lys Ala Val Leu His Arg
          20           25           30

Pro His Leu Ser Arg Phe Ala Met Val Ala Leu Gly Leu Leu Thr Val
          35           40           45

Ile Leu Met Ser Leu Leu Met Tyr Gln Arg Ile Leu Cys Cys Gly Ser
          50           55           60

Lys Asp Ser Thr Cys Ser His Cys Pro Ser Cys Pro Ile Leu Trp Thr
          65           70           75           80

Arg Asn Gly Ser His Cys Tyr Tyr Phe Ser Met Glu Lys Lys Asp Trp
          85           90           95

Asn Ser Ser Leu Lys Phe Cys Ala Asp Lys Gly Ser His Leu Leu Thr
          100          105          110
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Phe Pro Asp Asn Gln Gly Val Lys Leu Phe Gly Glu Tyr Leu Gly Gln
 115 120 125
 Asp Phe Tyr Trp Ile Gly Leu Arg Asn Ile Asp Gly Trp Arg Trp Glu
 130 135 140
 Gly Gly Pro Ala Leu Ser Leu Arg Ile Leu Thr Asn Ser Leu Ile Gln
 145 150 155 160
 Arg Cys Gly Ala Ile His Arg Asn Gly Leu Gln Ala Ser Ser Cys Glu
 165 170 175
 Val Ala Leu Gln Trp Ile Cys Lys Lys Val Leu Tyr
 180 185

<210> 4
 <211> 997
 <212> DNA
 <213> Mus musculus

<400> 4

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 aagtccaaga tgagtccaga tggaagctca aagctgtctt acaccggccc catctttccc 180
 gctttgcaat ggtggctttg gggcttttga ctgtgattct catgagtcta ctgatgtatc 240
 aacggatcct gtgctgcggc tccaaggact ctacatgttc cactgcccc agctgcccc 300
 tcctctggac gaggaatggt agccactgtt actatttttc aatggagaaa aaggactgga 360
 attctagtct gaaattctgt gcagacaaag gctcacatct cttacattt ccgacaacc 420
 agggagtgaa gctgttttga gactacctgg gtcaggactt ttactggatc ggcttgagga 480
 acattgatgg ctggaggtgg gaaggcggcc cagcgctcag cttgaggatt cttaccaaca 540
 gcttgataca gaggtgcggt gccattcaca gaaatggcct ccaagcctcc agttgtgaag 600
 ttgcttttga gtggatctgt aagaagggtcc tatactgatg gatgccactg tgcctgagc 660
 ctcgatctg ccacatgtgt ttaaaaagag ggaatgggtc tggggaatct ttgtctacaa 720
 atgtgtgttt aacaaatgcc aaacctgtta tgatatgcca ttagacagag gattagcata 780
 ctttctggg ggttggcctt ttctgttgg gctttttccg cgactgttta agtattaggc 840
 tagccattta aagcctaaat ctgggcaaata caaatgataa agcttattta atggataccc 900
 accctgcaga tagccaccct ggctctctca tccttctctg gccatctctg tcaagagaga 960
 gaaactatca tcctcagaga tgaccctgcg catcaga 997

<210> 5
 <211> 188
 <212> PRT
 <213> Rattus norvegicus

<400> 5

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Met Ala Asp Asn Ser Ile Tyr Ser Thr Leu Glu Leu Pro Ala Ala Pro
1           5           10           15

Arg Val Gln Asp Asp Ser Arg Trp Lys Val Lys Ala Val Leu His Arg
          20           25           30

Pro Cys Val Ser Tyr Leu Val Met Val Ala Leu Gly Leu Leu Thr Val
          35           40           45

Ile Leu Met Ser Leu Leu Leu Tyr Gln Arg Thr Leu Cys Cys Gly Ser
          50           55           60

Lys Gly Phe Met Cys Ser Gln Cys Ser Arg Cys Pro Asn Leu Trp Met
65           70           75           80

Arg Asn Gly Ser His Cys Tyr Tyr Phe Ser Met Glu Lys Arg Asp Trp
          85           90           95

Asn Ser Ser Leu Lys Phe Cys Ala Asp Lys Gly Ser His Leu Leu Thr
          100          105          110

Phe Pro Asp Asn Gln Gly Val Asn Leu Phe Gln Glu Tyr Val Gly Glu
          115          120          125

Asp Phe Tyr Trp Ile Gly Leu Arg Asp Ile Asp Gly Trp Arg Trp Glu
          130          135          140

Asp Gly Pro Ala Leu Ser Leu Ser Ile Leu Ser Asn Ser Val Val Gln
          145          150          155          160

Lys Cys Gly Thr Ile His Arg Cys Gly Leu His Ala Ser Ser Cys Glu
          165          170          175

Val Ala Leu Gln Trp Ile Cys Glu Lys Val Leu Pro
          180          185

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<210> 6
 <211> 1461
 <212> DNA
 <213> Rattus norvegicus

<400> 6

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gatggaaggt caaagctgtc ttacaccgac cctgtgtttc ctaccttggtg atgggtggctt      180
tggggctttt gactgtgatt ctcatgagtc tactgttgta ccaacggact ctgtgctgtg      240

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gctccaaggg ctttatgtgt tcccagtgt ccaggtgccc caacctctgg atgaggaacg      300
ggagccactg ttactacttc tcaatggaga aaagggactg gaactctagt ctgaagttct      360
gtgcagacaa aggctcgcat ctccctacat ttccggacaa ccagggagtg aacctgttcc      420
aggagtatgt gggcgaggac ttttactgga ttggcttgag ggacatcgat ggctggaggt      480
gggaagatgg cccagctctc agcttaagca ttctctctaa cagcgtggta cagaagtgtg      540
gcaccatcca caggtgtggc ctccacgcct ccagttgtga ggttgctttg cagtggatct      600
gtgagaaggt cctgccctga aggattccac tgtgtcccaa gcctcagatc tgccacatgt      660
cttcaaaaag agggaatggg catggggaac ctctgttcac aaaggtgtct ttagcaaattg      720
ccaaacctgt tatgatatgc cattagacag gcgtagcat tccttctctg gagctggcat      780
ttttcaactg ggctttctca gtcattgttag ccatttaaag cctaaatctg ggcaaattgaa      840
atagataaaa tttattttga tggctcttac tgcacaaact caccctggct ttctcatccc      900
atactctgcc atatctatca aagatatgtg caaaactatt catctgcaga agaacccccca      960
ccacggtcaa taacacatta catagacatc gaatagagac agaaaagcaa acacctcctg     1020
ttctcactcc tgcttggaag ctgaagtagc tcaagcctga ggtgtaggga gaagtgcagt     1080
ggttaccaga gtccaggaga ctgaagggat ggtagagggt ggtaaatggt ttggctgggtg     1140
tggggtgacc atcatgatta atgattgttg tatgtttgcc aatatgttgt gaacttccgg     1200
atagcgaggt ggaaggaccg tgggtgttac caaatgcctg caggagagat gtgctgagaa     1260
ccctgactgg atgattttcca cacacattga aatatcacac tgtgccccat aaatgtgtac     1320
aatcattatc tatccctaata ttccctaaaa attaaagaag tccaattaa aataaaaaaat     1380
acctttctgc taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1440
aaaaaaaaaa aaaaaaaaaa a                                     1461

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<210> 7

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 7

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ccttgtgatg gtggctttgg ggcttttgac tg                                     32

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<210> 8
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 8

actgcaaagc aacctcacia ctggaggc

28

<210> 9
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 9

atatggatcc tccaaggact ctacatgttc

30

<210> 10
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 10

atatgcggcc gctcagtata ggaccttctt acag

34

<210> 11
 <211> 64
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 11

cccggatccg catcaccatc accatcacgc ggccgcttcc aaggactcta catgttccca

60

ctgc

64

<210> 12
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 12

atatgcggcc gctcagtata ggaccttctt acag 34

<210> 13
 <211> 73
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 13

cccaagctta caaccatggc tgaccgctct atcgctcaa cagccgagct gccggaggca 60

cctcaagtcc aag 73

<210> 14
 <211> 66
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 14

cccctcgagc tacagatcct cttcagagat gagtttctgc tcgtatagga ctttcttaca 60

gatcca 66

<210> 15
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 15

cgacaactct atctactcaa cactagagct gc 32

<210> 16
<211> 31
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 16

cacagaattt cagactcgag ttccagtcct t

31

<210> 17
<211> 30
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 17

actggaactc gagtctgaaa ttctgtgcag

30

<210> 18
<211> 32
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 18

ggatgaattc cccgtatagg accttcttac ag

32

<210> 19
<211> 35
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 19

acgaattcac aaccatggcc gacaactcta tctac

35

<210> 20
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 20

ggatgaattc cccgtatagg accttcttac ag

32